

# INDEX OF AUTHORS' NAMES.

## TRANSACTIONS, PROCEEDINGS, AND ABSTRACTS.

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1-phenol-4-mercaptan [4-thiolphenol], A., i, 680.
- Zink, Julius**, and *Friedrich Hollandt*, critical observations on the estimation of the hardness of water according to the methods of Wartha-Pfeifer and C. Blacher, A., ii, 490.  
Blacher's method of estimating the hardness of water, A., ii, 670.
- Zollinger**. See *Richard Willstätter*.
- Zotier, V.**, action of hydrogen peroxide on basic lead salts, A., ii, 465.
- Zsigmondy, Richard**, and *Wilhelm Bachmann*, manipulation of the immersion ultramicroscope, A., ii, 630.
- Zuattro, Giuseppe di**. See *Guido Izar*.
- Zublena, Silvio**, rapid estimation of zinc in its ores; direct application of Fray's method to the analysis of ores, A., ii, 296.
- Zuccari, Gino**, presence of arsenic as a normal constituent of soil, A., i, 128.
- Zuntz, Nathan**, respiration and metabolism of ruminants; a correction, A., i, 367.
- Zwickner, J. J. L.**, a rapid apparatus for ether extractions, A., ii, 120.